What is claimed is:

1. A method of inspecting a flat display device having a plurality of signal wires, comprising:

scanning one or more signal wires by using a magnetic sensor; and

detecting a resistance change of the magnetic sensor to perceive a short in the signal wire.

2. The method according to claim 1, wherein detecting the resistance change of the magnetic sensor comprises:

detecting the resistance of the magnetic sensor depending on the change of current flowing in the magnetic sensor; and

determining the short in the signal wire if the resistance of the magnetic sensor is larger than a designated reference value.

3. The method according to claim 1, further comprising applying different voltages to adjacent signal wires.

4. The method according to claim 3, wherein applying the different voltages to the adjacent signal wires comprises:

applying a first common voltage to odd-numbered signal wires; and

applying a second common voltage to even-numbered signal wires.

5. The method according to claim 4, wherein the magnetic sensor scans the signal wire on pads connected to an other side of the signal wires.

6. The method according to claim 1, wherein the magnetic sensor

includes a hard magnetic layer and a soft magnetic layer, and wherein the magnetization direction of the soft magnetic layer is changed depending on an induced magnetic field from the signal wire.

7. The method according to claim 6, wherein perceiving the short of the signal wire includes determining the short in the signal wire when a primary magnetization direction of the soft magnetic layer is inverted.

8. A method of inspecting a liquid crystal display having a plurality of signal wires, comprising:

scanning one of more second signals wires stacked over at least one of first signal wires, the first and second signal wires being separated by an insulation layer; and

detecting a resistance change of the magnetic sensor to perceive an interlayer short between the first and the second signal wires.

9. The method according to claim 8, wherein perceiving an interlayer short between the first and second signal wires includes:

detecting the resistance of the magnetic sensor depending on a change of a current flowing in the magnetic sensor; and

determining the short of the first and second signal wire if the resistance of the magnetic sensor is larger than a designated reference value.

10. The method according to claim 8, further comprising:

applying a first common voltage to one side of the first signal wires; and

applying a second common voltage to one side of the second signal wires.

11. The method according to claim 8, wherein the magnetic sensor scans the second signal wire on the pads connected to the other side of the second signal wire.

12. The method according to claim 8, wherein the magnetic sensor includes a hard magnetic layer and a soft magnetic layer, and the magnetization direction of the soft magnetic layer is changed by an magnetic field induced from the first and second signal wires.

13. The method according to claim 12, wherein perceiving the interlayer short between the first and second signal wires includes determining the short of the signal wire when a primary magnetization direction of the soft magnetic layer is inverted.

14. A method of inspecting a liquid crystal display device having a plurality of signal wires, comprising:

scanning an electrode pattern by using a sensor array including one or more magnetic sensors below a pixel in size; and

detecting the resistance change of each of the magnetic sensors to perceive defects in the electrode pattern.

15. The method according to claim 14, wherein detecting the resistance change of the magnetic sensor includes:

detecting the resistance of the each of the magnetic sensors with the change of the current flowing to each of the magnetic sensors; and

determining a short in a portion of the electrode pattern at the location where the resistance of the magnetic sensor is larger than a designated reference value.

16. The method according to claim 14, further comprising applying current to the electrode pattern.

17. The method according to claim 14, wherein the magnetic sensor includes a hard magnetic layer and a soft magnetic layer, wherein the magnetization direction of the soft magnetic layer is changed by an magnetic field induced from the signal wire.

18. The method according to claim 17, wherein detecting the resistance change of each of the magnetic sensors includes determining that the electrode pattern is lost when the incipient magnetization direction of the soft magnetic layer is returned to the incipient magnetization direction at the location where the electrode pattern is lost after inverting by the induced magnetic field from the electrode pattern where the current flows.

19. An apparatus for inspecting a flat display device having a plurality of signal wires, comprising:

a magnetic sensor for scanning one or more signal wires; and

a detecting circuit for detecting a resistance change of the magnetic sensor to perceive a short in the signal wire.

20. The apparatus according to claim 19, wherein the magnetic sensor comprises one of a giant magneto-resistance sensor, a magneto-resistance sensor, a tunneling magneto-resistance sensor, a fluxgate sensor or an inductive sensor.

21. The apparatus according to claim 19, wherein the detecting circuit detects the resistance of the magnetic sensor with a change

of current flowing to the magnetic sensor.

22. The apparatus according to claim 19, further comprising a voltage source for supplying different voltages to adjacent signal wires.

23. The apparatus according to claim 22, wherein the voltage source comprises

a first voltage source for supplying a first common voltage to one side of odd-numbered signal wires; and

a second voltage source for supplying a second common voltage different from the first common voltage to one side of even-numbered signal wires.

24. The apparatus according to claim 23, wherein the magnetic sensor scans the signal wires on the pads connected to an other side of the signal wires.

25. An apparatus of inspecting a liquid crystal display, comprising:

a magnetic sensor for scanning on at least one second signal wire stacked over at least one first signal wire, an insulation layer being located between the first signal wire and the second signal wires; and

a detecting circuit for detecting a resistance change of the magnetic sensor to perceive an interlayer short in the signal wires.

26. The apparatus according to claim 25, wherein the magnetic sensor comprises one of a giant magneto-resistance sensor, a magneto-resistance sensor, a tunneling magneto-resistance sensor,

a fluxgate sensor or an inductive sensor.

27. The apparatus according to claim 25, wherein the detecting circuit detects the resistance of the magnetic sensor with a change of current flowing to the magnetic sensor.

28. The apparatus according to claim 25, further comprising:

a first voltage source for supplying a first common voltage to one side of the first signal wires; and

a second voltage source for supplying a second common voltage different from the first common voltage to one side of the second signal wires.

29. The apparatus according to claim 25, wherein the magnetic sensor scans the first and second signal wires on pads connected to an other side of the first and second signal wires.

30. An apparatus for inspecting a liquid crystal display, comprising:

a magnetic sensor including at least one magnetic sensor below a pixel in size for scanning over an electrode pattern; and

a detecting circuit for detecting a resistance change of each of the magnetic sensors to perceive defects in the electrode pattern.

31. The apparatus according to claim 30, wherein the magnetic sensors comprises one of a giant magneto-resistance sensor, a magneto-resistance sensor, a tunneling magneto-resistance sensor, a fluxgate sensor or an inductive sensor.

32. The apparatus according to claim 30, wherein the detecting

circuit detects the resistance of each of the magnetic sensors with a change of the current flowing to each of the magnetic sensors.

33. The apparatus according to claim 30, further comprising a voltage source for supplying a current to the electrode pattern.